

IN THE CLAIMS:

Please cancel Claims 14 to 16 without prejudice or disclaimer of subject matter and amend the claims as shown below. The claims, as currently pending in the application, read as follows.

1. (Currently Amended) An interface apparatus for inputting information from an external apparatus, comprising:

a first circuit for ;in accordance with a change in information input from the external apparatus, fetching information input from the external apparatus, after an elapse of a predetermined time waiting until a predetermined time has elapsed from a time when information input from the external apparatus has changed, and after the predetermined time has elapsed from the time when the information input from the external apparatus has changed, fetching the information input from the external apparatus; and

a second circuit for determining whether the information fetched by the first circuit is the same as information fetched by the first circuit a previous time, and in accordance with a determination that the information fetched by the first circuit is not the same as the information fetched by the first circuit the previous time, outputting the fetched information, and

wherein, in accordance with a determination that the information fetched by the first circuit is the same as the information fetched by the first circuit the previous time, the second circuit does not output the fetched information.

2. (Currently Amended) An apparatus according to claim 1, wherein said first circuit comprises:

    a change detector for outputting a reset in the case where there is a change in the information input from the external apparatus;

    a timer for inputting the reset output by the change detector and outputting a trigger after the elapse of ~~the~~ a predetermined time from the input of the reset; and

    a latch for inputting the trigger output by the timer and fetching the information input from the external apparatus in accordance with the input of the trigger.

3. (Previously Presented) An apparatus according to claim 1, wherein the external apparatus forms the information such that information is non-continuous information.

4. (Previously Presented) An apparatus according to claim 1, wherein the information which is input from the external apparatus is input to the first circuit and the information fetched by said first circuit is input to the second circuit.

5. (Currently Amended) A printer comprising:

    a first circuit for ;~~in accordance with a change in information input from an external apparatus, fetching information input from the external apparatus, after an elapse of a predetermined time~~ waiting until a predetermined time has elapsed from a time when information input from an external apparatus has changed, and after the predetermined

time has elapsed from the time when the information input from the external apparatus has changed, fetching the information input from the external apparatus;

a second circuit for determining whether the information fetched by the first circuit is the same as information fetched by the first circuit a previous time, and in accordance with a determination that the information fetched by the first circuit is not the same as the information fetched by the first circuit the previous time, outputting the fetched information, and wherein, in accordance with a determination that the information fetched by the first circuit is the same as the information fetched by the first circuit the previous time, the second circuit does not output the fetched information; and

a printer engine for printing the information output by the second circuit.

6. (Currently Amended) An information processing method for inputting information from an external apparatus, comprising:

a first step of ;in accordance with a change in information input from the external apparatus, fetching information input from the external apparatus, after an elapse of a predetermined time waiting until a predetermined time has elapsed from a time when information input from the external apparatus has changed, and after the predetermined time has elapsed from the time when the information input from the external apparatus has changed, fetching the information input from the external apparatus; and

a second step of determining whether the information fetched by the first step is the same as information fetched by the first step a previous time, and in accordance with a determination that the information fetched in the first step is not the same as the

information fetched by the first step the previous time, outputting the fetched information, and

wherein, in accordance with a determination that the information fetched in the first step is the same as the information fetched by the first step the previous time, the fetched information is not output in the second step.

7. (Currently Amended) A method according to claim 6, wherein said first step comprises:

a change detecting step of outputting a reset in the case where there is a change in the information input from the external apparatus;

a timer step of inputting the reset output by the change detecting step and outputting a trigger after the elapse of ~~the~~ a predetermined time from the input of the reset; and

a latch step of inputting the trigger output by the timer step and fetching the information input from the external apparatus in accordance with the input of the trigger.

8. (Previously Presented) A method according to claim 6, wherein the external apparatus forms the information such that same information does not continue.

9. (Previously Presented) A method according to claim 6, wherein the first step is executed by a glitch noise filter and the second step is executed by a logical filter.

10. (Currently Amended) A printing method for a printing apparatus, comprising:

a first step of ;in accordance with a change in information input from an external apparatus, fetching information input from the external apparatus, after an elapse of a predetermined time waiting until a predetermined time has elapsed from a time when information input from an external apparatus has changed, and after the predetermined time has elapsed from the time when the information input from the external apparatus has changed, fetching the information input from the external apparatus;

a second step of determining whether the information fetched in the first step is the same as information fetched by the first step a previous time, and in accordance with a determination that the information fetched in the first step is not the same as the information fetched by the first step the previous time, outputting the fetched information, and wherein, in accordance with a determination that the information fetched in the first step is the same as the information fetched by the first step the previous time, the fetched information is not output in the second step; and

a step of printing the information output in the second step.

11. (Previously Presented) An apparatus according to claim 1, wherein, if the fetched information continuously repeats a same value, said second circuit skips the fetched information.

12. (Previously Presented) A method according to claim 6, wherein, if the fetched information continuously repeats a same value, said second step skips the fetched information.

13. to 16. (Canceled)